CONCEPT: CHROMOSOMAL REARRANGEMENTS: DELETIONS

● **Deletions** are a type of chromosomal rearrangement that results in a loss of a part of a chromosome arm

□ Deletions require that there are two breaks to cut out the segment

- The deleted chromosomal segment contains no centromere – and is lost after cell division

□ There are many types of _____

Deletion type	**Location of deletion**
Intragenic deletion	Within a gene
Multigenic deletions	Multiple genes
Terminal Deletions	End of a chromosome
Intercalary Deletions	Interior of a chromosome

● Deletions cause a couple of important _____

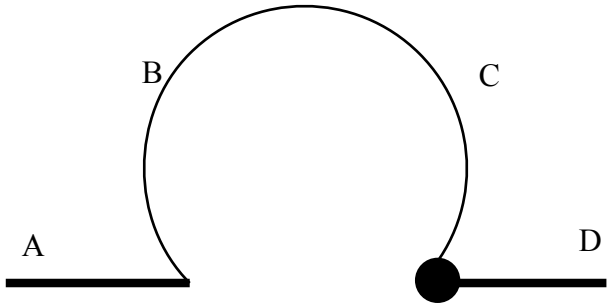
□ **Pseudodominance** occurs when the deletion allows for a single recessive allele to show its phenotype

□ A **deletion loop** is created between between the normal homolog and its partner congaing the missing segment

- Allows for proper segregation during meiosis

□ A human example of a deletion is **Cri du chat syndrome** which is caused by a deletion in chromosome 5

EXAMPLE:



PRACTICE

1. An intragenic deletion is a deletion found where?
    a. In a centromere
    b. In a gene
    c. In multiple chromosomes
    d. In multiple genes

2. Deletions can cause what type of phenotype?
    a. Leaky allele
    b. Psudodominance
    c. Intercalary
    d. Faulty

3. Which of the following genetic diseases is an example of a chromosomal deletion?
    a. Down syndrome
    b. Familial down syndrome
    c. Cri du Chat syndrome
    d. Klinefelter's Disease